#### REMARKS

Claims 1, 2, 4, 8-12, 41-48, and 50-59 are pending in the application with claims 1 and 8 being the independent claims. Claims 3, 37-40, and 49 are cancelled without prejudice to or disclaimer of the subject matter therein. Claims 1, 4, 8, 41, 42, 51, and 59 are amended. Applicants respectfully request reconsideration.

## **Specification**

The Office Action objected to the Specification as having a typographical error. This response corrects the typographical error. Accordingly, Applicants respectfully request that the objection be withdrawn.

#### Claim Objections

The Office Action objected to claims 42 and 51 as having typographical errors. This response corrects the typographical errors. Accordingly, Applicants respectfully request that the objection be withdrawn.

## Compliance with 35 U.S.C. § 102

The Office Action indicated that claims 1-2, 8-12, and 37-39 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,402,750 to Atkinson et al. ("Atkinson"). In a telephone message on January 17, 2007, the Examiner indicated that claims 8-12 should have been shown in the Office Action as being rejected under 35 U.S.C. §103 instead of §102. As stated above, this paper cancels claims 37-39.

Dependent claim 40 and intervening claim 3 were rejected under 35 U.S.C. §103. Claim 1 is amended to include the subject matter of dependent claim 40 and intervening claim 3.

Accordingly, the amendment to claim 1 should remove independent claim 1 out from under the §102 rejection. Therefore, claim 1 is discussed below relative to the rejections under §103.

## Compliance with 35 U.S.C. §103

The Office Action indicated that claims 3, 4, and 40-59 are rejected under 35 U.S.C. §103(a) as being unpatentable over Atkinson in view of U.S. patent No. 6,652,257 to Zucherman et al. ("Zucherman") and in view of U.S. Patent Publication No. 2005/0101956 to Simonson. As stated above, in the telephone message, the Examiner indicated that claims 8-12 also are rejected under §103 under this same combination of references.

Claim 8 is rewritten to include the features of claim 49, as well as being amended to properly call out the first and second biocompatible devices. Claim 1 is amended to include the features of claim 40 and intervening claim 3. Applicants traverse the rejection.

## A. <u>Simonson is not prior art</u>

As an initial matter, U.S. Patent Publication No. 2005/0101956 to Simonson is not prior art to the present application and for this reason alone, the final Office Action fails to establish a *prima facie* case of obviousness with respect to claims 3, 4, 8-12, and 39-59.

# B. Even When Combined, the References Do Not Teach the Claimed Subject Matter

The Atkinson, Zucherman, and Simonson references cannot be applied to reject claims 1 and 8 under 35 U.S.C. § 103 which provides that:

A patent may not be obtained ... if the differences between the subject matter sought to be patented and the prior art are such that the <u>subject matter as a whole</u> would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains ... (Emphasis added)

Thus, when evaluating a claim for determining obviousness, all limitations of the claim must be evaluated.

As indicated above, claim 40 was written into independent claim 1, and claim 49 was written into independent claim 8. Claim 1 and claim 8 each now recite:

a joint component positioned between the first and second biocompatible attachment devices, and wherein the joint component is configured to allow motion at the facet joint.

The Office Action relies upon Zucherman for a teaching of joint. Specifically, the Office Action identifies Col. 4, lines 8-29 as teaching the joint. The relevant portion of those lines in Zucherman states:

The spacer 102 is attached with the first connection rod 108 and the second connection rod 114 by the bolt 103. Until tightened, the bolt 103 allows the first and second connection rods 108, 114 to rotate relative to the spacer (see FIG. 2). This allows the hooks 104, 106 to engage a spinous process that are at different angles and distances relative to the spacer 102.

However, this alone does not render claim 1 or claim 8 unpatentable because Zucherman in combination with Atkinson does not teach all the features of claims 1 or 8. For example, Zucherman does not teach that its joint is configured to allow motion at the facet joint as recited in claims 1 and 8. Zucherman is directed to a fusion system, and not a dynamic system that would allow motion at the facet joint. For example, the section of Zucherman identified in the Office Action discloses a connection that allows the rods 108, 114 to rotate relative to the spacer only "[u]ntil tightened." Zucherman, column 4, lines 25-28. In addition, in one embodiment, Zucherman discloses that after placement "[A]ll the bolts would then be tightened." Column 7, lines 7-8. In the other embodiment, the word "tighten" is not used, however, it is apparent that the bolt is intended to be tightened. Throughout the reference, Zucherman continuously refers to "fusion," "fixation," "rigidly fix," and calls its device a "fixation device." Zucherman also

specifically states that the invention can "immobilize spinous processes relative to each other." Column 7, lines 12-14.

Accordingly, although Zucherman may disclose that "the bolt 103 allows the first and second connection rods 108, 114 to rotate relative to the spacer," it does not teach or suggest that "the joint component is configured to allow motion at the facet joint," as recited in claims 1 and 8.

Therefore, even if the device of Atkinson were modified to include the connection rods and hooks of Zucherman, Atkinson would not have a "joint configured to allow motion at the facet joint," as recited in claims 1 and 8.

Simonson was relied upon for a teaching of an elastic material. Office Action page 4. Simonson does not correct the deficiency of Atkinson and Zucherman with respect to claim 1 because employing an elastic material at the joint of Zucherman would not change Zucherman. Simonson discloses an elastic stop that limits articulation of a pivotable screw head. Applying the pivotable screw head stop would not change the deficiencies of Atkinson and Zucherman. Therefore, the combination of Atkinson, Zucherman, and Simonson does not establish a *prima facie* case of obviousness.

For at least this reason, Applicants submit that claims 1 and 8 should now be in a condition for allowance.

## C. Nonanalogous art cannot be used to establish obviousness

In the present case, the present invention relates to a dynamic device while Zucherman is directed to a fusion or fixation device. Section 103 requires that obviousness be determined on the basis of whether at the time the invention was made a person of ordinary skill in the art to which the subject matter pertains would have found the claimed invention as a whole obvious. Although one of ordinary skill in the art is presumed to be aware of all prior art in the field to which the invention pertains, he is not presumed to be aware of prior art <u>outside that field and the</u>

field of the problem to be solved, *i.e.*, nonanalogous art. Accordingly, in assessing the propriety of any assertion of prior art as a basis for a *prima facie* case of obviousness one must determine the scope or bounds of the knowledge of one of ordinary skill in the art, *i.e.*, the analogous art presumably known by one of ordinary skill in the art.

Here, since fusion or fixation devices are outside the field of dynamic devices, the cited reference is from a nonanalogous art thus precluding any *prima facie* case of obviousness.

Thus, for this independent reason, Applicants submit that the burden of factually supporting a *prima facie* case of obviousness has not been met, and the rejection under 35 U.S.C. §103 should be withdrawn.

D. Prior Art That Teaches Away From the Claimed Invention Cannot be Used to Establish Obviousness

The combination of Atkinson and Zucherman fail to establish a *prima facie* case of obviousness with regard to amended claim 1 and amended claim 8 because Atkinson teaches away from a flexible device having a joint. Atkinson explains that its dynamic device 100 "preferably operates with substantially linear displacement substantially parallel to the axis of curvature 60." See Atkinson, column 9, lines 62-64. It discusses at length calculating its forces using linear models. See Atkinson, column 10, lines 20-49. Even when discussing a leaf spring embodiment, it states that the "radius or axis of curvature of the leaf spring 142 is preferably maximized such that displacement of the attachment members 144 is substantially linear." See Atkinson, column 18, lines 22-25.

Since it is well recognized that teaching away from the claimed invention is a *per se* demonstration of lack of *prima facie* obviousness, Applicants submit that the Office Action has not established a *prima facie* conclusion of obviousness.

Thus, for this reason alone, Applicants submit that a *prima facie* case of obviousness has not been established, and the rejection under 35 U.S.C. §103 should be withdrawn.

E. The references are not properly combinable if their intended function is destroyed

In addition, the combination of Atkinson and Zucherman fail to establish a *prima facie* case of obviousness with regard to claim 3 and amended claim 8 because if combined, Zucherman's intended function is destroyed. Zucherman provides a "method and apparatus for assisting in the fusing together of vertebral bodies of the spine." See Zucherman, column 2, lines 13-15. Accordingly, implementing a system as disclosed in Zucherman in the dynamic device in Atkinson would destroy Zucherman's intended function of eliminating movement between vertebrae. Zucherman does not disclose a device that replaces functions of a facet joint. Therefore, the combination of Atkinson and Zucherman appears to be improper and should not render claims 1 or 8 unpatentable.

## **Dependent Claims**

Claims 2, 4, 41-48, and 59 and claims 9-12 and 50-57 respectively depend from claims 1 and 8 and also are believed to be distinct from the art of record, for example for the same reasons discussed above with respect to claim 1 and 8, respectively. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of these claims.

#### Conclusion

For at least the reasons set forth above, Applicants respectfully request that the Examiner reconsider and issue a formal notice of allowance. If the Examiner determines that a telephone discussion with the undersigned would further prosecution of the application, the Examiner is invited to telephone the undersigned at 972-739-6969.

Please grant any extension of time required to enter this response and charge any additional fees required by this paper to our Deposit Account No. 08-1394.

Respectfully submitted,

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Certificate of Service

I hereby certify that this correspondence is being filed with the U.S. Patent and Trademark Office via EFS-Web on April 26, 2007.

Bonnie Boyle